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Assignment 0: Tokenizer

A program in C that takes String inputs of any size and separates it into specific tokens.

Types of Tokens Addressed in this program:

- Decimal Integer: a digit character followed by any number of digit characters
- Octal Integer: '0' character followed by any number of octal digits (0-7)
- Hexadecimal Integer: "0x" (or "0X") followed by any number of hexadecimal digits (0-9, af, A-F)
- Word: consists of an alphabetic character followed by any number of alphanumeric characters
- Floating Point: a decimal integer that has a '.' at any position other than the last. It may optionally contain an exponent in scientific notation at the end
- C Operators: 44 operators that get identified as operator token

We have also implemented all 3 extra credits to include the following tokens:

- C Keywords: The 32 C Keywords like int, enum, float, etc are identified as C keywords from the input string
- Single Quote: ex: 'this is a single quote token'
- Double Quote: ex: "this is a double quote token"

Comments in C: These are skipped as they are comments. Comments starting with // end when they hit a \n or \0. Comments starting with /* end when they hit */

Compilation: Compile as follows in the command line

```
$ gcc -o tokenizer tokenizer.c
```

Run: Must run with two arguments in command line

```
./tokenizer "input string"
```